Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-22 canceled.

- 23. (Currently amended) A photopolymerizable dental restorative material comprising: particles of filler; first monomers having thiol functional groups; second monomers having vinyl functional groups; and an initiator selected from camphorquinone and 2,2-dimethoxy-2-phenylacetophenone; wherein at least about 10% of the functional groups in the dental restorative material are thiol functional groups; and wherein the material does not contain an additional initiator; and wherein, upon exposure to light, the material cures without oxygen inhibition; and wherein after polymerization the material exhibits a flexural strength of greater than 100 Mega Pascals.
- 24. (Previously Amended) The photopolymerizable dental restorative material of claim 23, wherein at least about 15% to about 60% of the functional groups in the dental restorative material are thiol functional groups.
- 25. (Previously Amended) The photopolymerizable dental restorative material of claim 23, wherein at least about 45% to about 55% of the functional groups in the dental restorative material are thiol functional groups.

Claims 26-28 canceled.

- 29. (Original) The photopolymerizable dental restorative material of claim 23 that when polymerized exhibits a volume shrinkage of less than 10%.
- 30. (Original) The photopolymerizable dental restorative material of claim 23 that when polymerized creates a polymer having an average weight loss, when dried, of 0.4 to 0.6% relative to an original mass before extraction.

Claim 31 canceled.

- 32. (Original) The photopolymerizable dental restorative material of claim 23 that when polymerized creates a polymer having a shrinkage stress of less that 3.0 MPa.
- 33. (Original) The photopolymerizable dental restorative material of claim 23 that when polymerized creates a polymer having a shrinkage stress of less that 1.5 MPa.
- 34. (Original) The photopolymerizable dental restorative material of claim 23 that when polymerized creates a polymer having a shrinkage stress of less that 0.5 MPa.

Claims 35-43 canceled.

- 44. (Currently amended) The photopolymerizable dental restorative material of claim 23, which is curable with visible light, wherein the initiator is camphorquinone, and wherein, upon exposure to visible light, the material cures without oxygen inhibition.
- 45. (Previously presented) The photopolymerizable dental restorative material of claim 44, further comprising an amine accelerator.
- 46. (Previously presented) The photopolymerizable dental restorative material of claim 45, wherein the amine accelerator is ethyl 4-(dimethylamino)benzoate.
- 47. (Previously presented) The photopolymerizable dental restorative material of claim 23, which is curable with ultraviolet-light, wherein the initiator is 2,2-dimethoxy-2-phenylacetophenone.